

Abstract

The present invention is related to valves for the controlling the flow of media. For example, the valves of the present invention may control the flow of solid media into a fluid stream. More, specifically, the valves of the present invention may be used to control the flow of a blasting media into an air stream as part of a blasting apparatus for treatment of a surface. In one embodiment, the media control valve of the present invention includes a valve body having a media inlet and a media outlet. A housing is connected to the valve body. A plunger is positioned within the valve body and is connected to a piston positioned within the housing. A base is connected to the valve body such that it communicates with the media outlet. The media control valve of this embodiment may further include a sleeve disposed between the valve body and the plunger. This sleeve may contain a media opening. In some embodiments of the media control valve of the present invention, the media opening has a first portion proximate to the media outlet and a second portion distal to the media outlet, the second portion being broader than the first portion. In other embodiments of the invention, the piston includes a contaminant isolation region.